Acute Generalized Exanthematous Pustulosis Induced by Dextropropoxyphene and Confirmed by Patch Testing

Sir,

Acute generalized exanthematic pustulosis (AGEP) is a potentially severe disease caused by drug intake in about 80% of cases (1). Oral rechallenge is not ethical because it may provoke a generalized eruption, even at a low dose (2). Patch testing is an elegant alternative to prove the causative role of a suspected drug (3, 4) and it is particularly useful when there may be several causative drugs.

We describe the first case of AGEP secondary to dextropropoxyphene, an opioid analgesic with various trade names widely used alone or combined with paracetemol (known as Antalvic, Diantalvic and Propofan in France, Darvon and Wygesic in the USA, Capadex and Digesic in Australia, Cosalgesic in the UK, Liberen in Italy, Dolotard and Distalgesic in Sweden, etc).

CASE REPORT

A 43-year-old woman was admitted for a febrile eruption (39.2°C) of acute onset. Four days before the admission, the patient had been treated with spiramycin (Rovamycine), tenoxicam (Tilcotil) and the combination of dextropropoxyphene, paracetemol, chlorpheniramine, caffeine and carbaspirin calcium (Propofan) for parotiditis. Clinical examination showed generalized erythema, with numerous pustules on the trunk (Fig. 1). Histological examination of a cutaneous biopsy showed a subcorneal unilocular pustule with dermal oedema and infiltration of polymorphonuclear cells within the dermis. Routine blood tests showed mild hyperleukocytosis (1.3×10^{10}/L) with predominant neutrophils (1.0×10^{10}), raised erythrocyte sedimentation rate (60 mm at first hour) and elevated C-reactive proteins (102 mg/l, normal < 8 mg/l). There was no evidence of viral infection in the stools. The patient was treated with topical corticosteroids and the cutaneous lesions disappeared in 12 days.

The patient had experienced 2 similar episodes in the last 5 years. Each episode was preceded by intake of dextropropoxyphene combined with paracetemol (Diantalvic).

Patch testing was carried out 1 month later with dextropropoxyphene, paracetemol, spiramycin, aspirin and tenoxicam, all diluted at 5% and 20% in water and petrolatum, respectively. All tests with dextropropoxyphene were positive, and the others remained negative. Patch testing with dextropropoxyphene was negative in 10 controls. Histological examination of a positive patch test showed dermal oedema and intra-epidermal pustules.

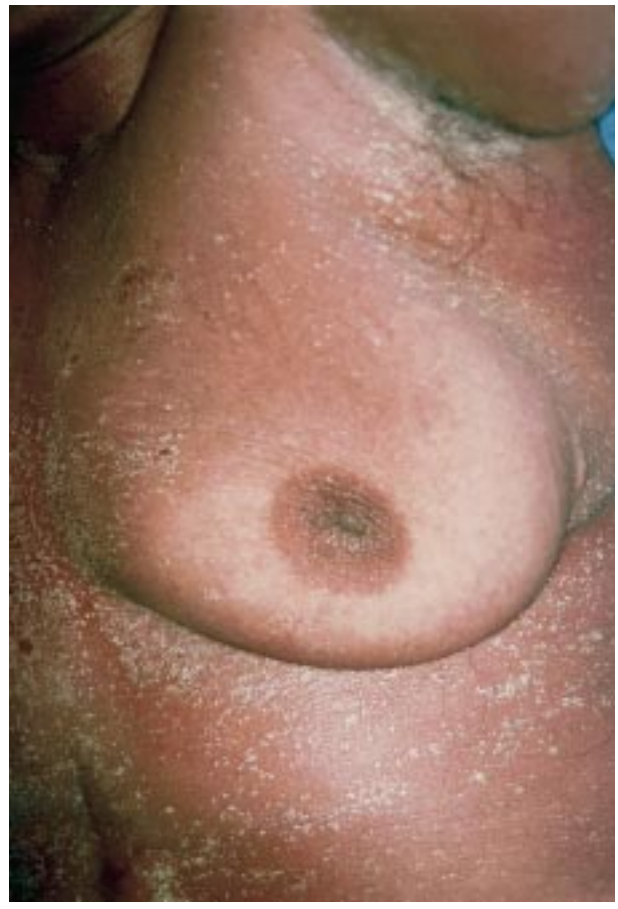

Fig. 1. Generalized erythema with numerous pustules on the trunk.

DISCUSSION

This case fulfilled the diagnostic criteria of AGEP established by Roujeau et al. (1). This is the first reported case with dextropropoxyphene. The causal relationship with dextropropoxyphene was very likely because all 3 episodes occurred 3–4 days after the patient started treatment with dextropropoxyphene. However, the other drugs could be suspected, particularly paracetemol, which had also been ingested before each episode in combination with dextropropoxyphene. Moreover, paracetemol (1, 5) and spiramycin (1, 4) have previously been reported to be causes of AGEP.

Patch testing was a valuable tool in establishing the responsibility of dextropropoxyphene in this case, as in other cases of AGEP (3–5). Because they lack sensitivity (50%), negative tests do not allow a definitive conclusion (concentration or vehicle might have been inadequate) (4). However, a positive test result is of great value if controls remain negative, and it could be used at the same concentration and in the same vehicle for further patch testing with the same drug when it is suspected of being responsible for AGEP.

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The Effectiveness of Low-Dose Intravenous Immunoglobulin in Chronic Urticaria

Sir,
Recently, positive effects of high-dose intravenous immunoglobulin (IVIG) (2 g/kg body weight) have been observed in immune thrombocytopenic purpura (ITP) (1, 2) as well as in autoimmune blistering diseases (3). Furthermore, successful treatments of autoimmune chronic urticaria with high-dose IVIG was reported (4).

Herein, we describe a very beneficial effect in a patient with a long-standing chronic urticaria tested negatively in a skin test with autologous serum. Since positive effects in pemphigus foliaceus (5) had been observed recently using a reduced dosage of IVIG, a low-dose treatment seemed preferable in this patient.

A 63-year-old woman presented at our department with a 2-year history of chronic urticaria previously treated with antihistamines, dapson, antibiotics and antimycotics in several departments of dermatology and allergology centres. At admittance, the patient was treated with a combination of H_1 and H_2 antihistamines. Despite this medication, 5 to 10 urticae, sized up to 10 cm in diameter, occurred 4 times/week indicating an urticaria score (4) of 8. We continued the antihistamine treatment and started an additional therapy with IVIG 0.2 g/kg body mass over 1 day with the re-administration of IVIG after 4 weeks. After the first application of IVIG, the urticaria score could be reduced to 1. At the time of re-administration, only a single lesion of about 1 cm in diameter was present. Finally, the urticaria score could be suppressed to 1 by repeated administrations of IVIG in intervals of 4 weeks. Therefore, IVIG at a low-dosage may also counteract in the familiar way with the immune system via Fc receptor blockade, anti-idiotypic antibodies and modulation of cytokines (6, 7).

In our opinion, this case clearly indicates that the administration of IVIG might be effective in suppressing antihistamine resistant chronic urticaria. Furthermore, this effect can also be observed at the lower dose of 0.2 g/kg body mass, which has the considerable advantage of decreasing costs as well as a reduced risk of side effects.

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